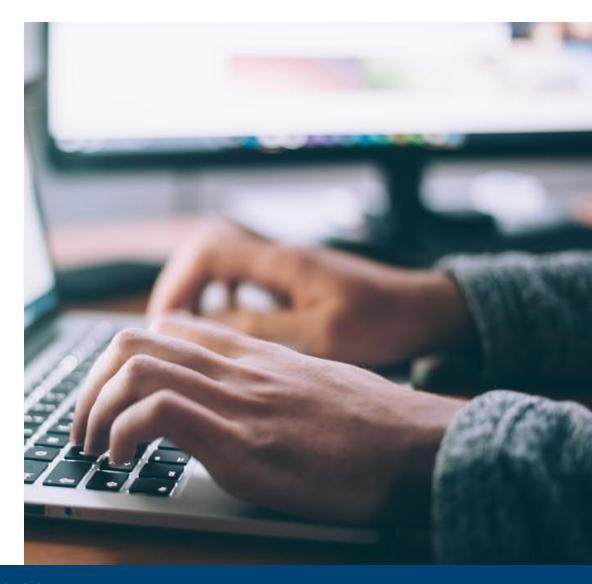
North Carolina Immunization Registry (NCIR)

Assessment Report User Guide

Last Updated: November 5, 2021





NCDHHS COVID-19 Response

# Overview



#### Overview

#### What is the North Carolina Immunization Registry (NCIR)?

The **North Carolina Immunization Registry (NCIR)** is a secure, web-based clinical tool which is the official source for North Carolina immunization information. Immunization providers may access all recorded immunizations administered in North Carolina, regardless of where the immunizations were given.

#### The purpose of NCIR is:

- To give patients, parents, health care providers, schools and child care facilities timely access to complete, accurate and relevant immunization data;
- To assist in the evaluation of a child's immunization status and identify children who need (or are past due for) immunizations;
- To assist communities in assessing their immunization coverage and identifying areas of under-immunization.

#### Now, let's get started!





#### What is an Assessment?

An assessment is a standardized routine collection, analysis and summary of immunization records

#### **How Will the Assessment Report Help Me?**

- Numbers only report- helps you see your immunization rates right away.
- Keep track of your clients' immunization status. Are they up to date? Do they need to come back in?
- Show the number of clients that could have been brought up to date with additional immunizations.
- Assessment of missed opportunities



### Why is it Important to Assess Immunization Rates?

- To increase immunization rates
- To ensure complete Immunization Records
- To identify pockets of need
- To help immunization providers to understand their true coverage rates



#### What Information Do you Need to Run the Report?

#### **Evaluation Date**:

• used to set the age range for the clients in the report.

#### **Client Population:**

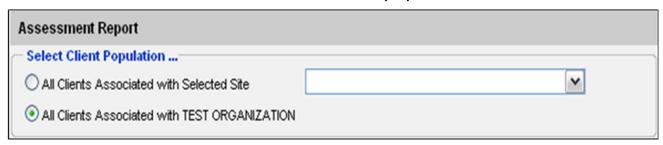
• options are available based on what type of provider is requesting the assessment



#### To Run an Assessment Report



Private Providers should select the client population. Private Provider view:



#### Health Department view:

| Assessment Report                                  |                                    |
|--|------------------------------------|
| — Select Client Population                         |                                    |
| All Clients Associated with Selected Site          | V                                  |
| All Clients Associated with Alamance County Heal   | th Department                      |
| OClients Residing in Selected Counties below       |                                    |
| O Clients within Alamance County Health Department | t or Residing in Selected Counties |

Choose Assessment Report

#### To Run an Assessment Report





Choose Assessment Report



#### **Report Status**



Stage 1



If Status is <u>Complete</u> click on link under <u>Job</u> name



# How to Understand the NCIR Assessment Summary Report



Verify the correct Client Population

#### **NCIR Assessment Summary**

Clients Associated with Provider: SIX FORKS DEPOT

Evaluation Date: 01/01/2009

Date Report Was Run: 07/27/2009

Note the **Date Report Was**Run

| Age Group             | Birth Date Range        | Records Analyzed |
|-----------------------|-------------------------|------------------|
| 36 - 72 Months of Age | 01/01/2006 - 12/02/2002 | 12               |
| 24 - 35 Months of Age | 01/01/2007 - 01/02/2006 | 8                |
| 12 - 23 Months of Age | 01/01/2008 - 01/02/2007 | 6                |
| < 12 Months of Age    | 01/01/2009 - 01/02/2008 | 4                |

Notice the **Evaluation Date** and how it corresponds to the **Birth Date Range** 



### **Age Groups**

Age groups included are clients who are of the below age on the evaluation date that was entered when the report was generated.

- 36-72 months of age
- 24-35 months of age
- 12-23 months of age
- <12 months of age



#### **Review the Number of Records Analyzed**

#### **NCIR Assessment Summary**

Clients Associated with Provider: SIX FORKS DEPOT

Evaluation Date: 01/01/2009 Date Report Was Run: 07/22/2009

| Age Group             | Birth Date Range        | Records Analyzed |
|-----------------------|-------------------------|------------------|
| 36 - 72 Months of Age | 01/01/2006 - 12/02/2002 | 12               |
| 24 - 35 Months of Age | 01/01/2007 - 01/02/2006 | 8                |
| 12 - 23 Months of Age | 01/01/2008 - 01/02/2007 | 6                |
| < 12 Months of Age    | 01/01/2009 - 01/02/2008 | 4                |

Verify the <u>Birth Date Range</u> corresponds with the Age Group(s) of interest. These Birth Date Ranges will be used to generate the Request Reminder report to identify clients who are not up to date.



#### **Important Information!**

- Records Analyzed shows how many active clients were in each Age Group as of the Date Report Was Run
- Data included in report is not updated in "real time"
- Changes made to a client's information during a particular day will not be reflected until the next day



#### **Immunization Status Report**

The "1-4" notation refers to the footnotes about benchmarks.

|             | Immunization Status                |                                       |
|-------------|------------------------------------|---------------------------------------|
| Age(months) | Up-to-Date <sup>1-4</sup><br>(UTD) | Late <sup>1-4</sup><br>UTD@Assessment |
|             | 36 - 72 Months of Age              |                                       |
| 72          | 33.33%                             | 33.33*                                |
| 24          | 50.00%                             | 50.00%                                |
| 12          | 50.00%                             | 66.67%                                |
| 7           | 41.67%                             | 66.67%                                |
|             | 24 - 35 Months of Age              |                                       |
| 24          | 50.00%                             | 62.50%                                |
| 12          | 75.00%                             | 97.50%                                |
| 7           | 62.50%                             | 97.50%                                |
|             | 12 - 23 Months of Age              |                                       |
| 12          | 50.00%                             | 93.33%                                |
| 7           | 33.33%                             | 93.33%                                |
|             | < 12 Months of Age                 |                                       |
| 7           | 25.00%                             | 50.00%                                |

<sup>1)</sup> UTD by 7 months equals 3 DtaP, 2 HepB, 2 HIB, 2 Polio



<sup>2)</sup> UTD by 12 months equals 3 DTaP, 2 HepB, 2 HIB, 2 Polio.

<sup>3)</sup> UTD by 24 months equals 4 DTaP, 3 HepB, 3 HIB, 1 MMR, 3 Polio.

<sup>4)</sup> UTD by 72 months equals 5 DtaP, 3 HepB, 4 HIB, 2 MMR, 4 Polio

Late UTD equals the same benchmark for the age group, but it is assessed on the date the report was

#### **Immunization Status Report**

Use months of age as your initial target group.

•This is the % UTD for the 2 year olds

|             | Immunization Status     |                                       |
|-------------|-------------------------|---------------------------------------|
| Age(months) | Up-to-Date 1-4<br>(UTD) | Late <sup>1-4</sup><br>UTD@Assessment |
|             | 36 - 72 Months of Age   |                                       |
| 72          | 33.33%                  | 33.33%                                |
| 24          | 50.00%                  | 50.00%                                |
| 12          | 50.00%                  | 66.67%                                |
| 7           | 41.67%                  | 66.67%                                |
|             | 24 - 35 Months of Age   |                                       |
| 24          | 50.00%                  | 62.50%                                |
| 12          | 75.00%                  | 97.50%                                |
| 7           | 62.50%                  | 97.50%                                |
|             | 12 - 23 Months of Age   |                                       |
| 12          | 50.00%                  | 93.33%                                |
| 7           | 33.33%                  | 93.33%                                |
|             | < 12 Months of Age      |                                       |
| 7           | 25.00%                  | 50.00%                                |



<sup>2)</sup> UTD by 12 months equals 3 DTaP, 2 HepB, 2 HIB, 2 Polio.

Late UTD equals the same benchmark for the age group, but it is assessed on the date the report was



<sup>3)</sup> UTD by 24 months equals 4 DTaP, 3 HepB, 3 HIB, 1 MMR, 3 Polio.

<sup>4)</sup> UTD by 72 months equals 5 DtaP, 3 HepB, 4 HIB, 2 MMR, 4 Polio

#### What I Need to Know

| Age Group             | Birth Date Range        | Records Analyzed |
|-----------------------|-------------------------|------------------|
| 24 – 35 Months of Age | 01/01/2007 – 01/02/2006 | 8.               |

| Immunization Status   |                       |                          |  |  |  |
|-----------------------|-----------------------|--------------------------|--|--|--|
| Age (months)          | Up-to-Date<br>(UTD)   | Late<br>UTD @ Assessment |  |  |  |
|                       | 24 – 35 Months of Age |                          |  |  |  |
| 24 <sup>1</sup>       | 50.00%                | 62.50%                   |  |  |  |
| 12 <sup>2</sup>       | 75.00%                | 87.50%                   |  |  |  |
| <b>7</b> <sup>3</sup> | 62.50%                | 87.50%                   |  |  |  |

- 1) UTD by 24 months equals 4 DTaP, 3 HepB, 1 MMR, 3 HIB, 3 Polio
- 2) UTD by 12 months equals 3 DTaP, 2 HepB, 2 HIB, 2 Polio
- 3) UTD by 7 months equals 3 DTaP, 2 HepB, 2 HIB, 2 Polio



#### A Look at Each Individual Vaccine at Different Ages (Benchmarks)

A "benchmark" is used as a standard for measuring or assessing something.

| Age Specific Immunizations Benchmarks |      |       |     |     |       |         |           |
|---------------------------------------|------|-------|-----|-----|-------|---------|-----------|
| UTD Grid                              | DTap | Hep B | Hib | MMR | Polio | Prevnar | Varicella |
| @ 3 months                            | 1    | 1     | 1   |     | 1     | 1       |           |
| @ 5 months                            | 2    | 2     | 2   |     | 2     | 2       |           |
| @ 7 months                            | 3    | 2     | 2   |     | 2     | 2       |           |
| @ 9 months                            | 3    | 2     | 2   |     | 2     | 2       |           |
| @ 12 months                           | 3    | 2     | 2   |     | 2     | 2       |           |
| @ 16 months                           | 4    | 3     | 3   | 1   | 3     | 3       | 1         |
| @ 19 months                           | 4    | 3     | 3   | 1   | 3     | 3       | 1         |
| @ 21 months                           | 4    | 3     | 3   | 1   | 3     | 3       | 1         |
| @ 24 months                           | 4    | 3     | 3   | 1   | 3     | 3       | 1         |
| @ 72 months                           | 5    | 3     | 4   | 2   | 4     | 4       | 1         |

The <u>Age Specific Immunization Benchmarks</u> grid shows how many vaccines are needed to be considered UTD at specific age milestones.

Clients are Considered UTD at 24 Months if They Have Received:

### 4 DTaP, 3 HepB, 3 Hib. 1 MMR. 3 Polio. 3 Prevnar. and 1 Varicella

| Age Specific Immunizations Benchmarks |      |       |     |     |       |         |           |
|---------------------------------------|------|-------|-----|-----|-------|---------|-----------|
| UTD Grid                              | DTap | Hep B | Hib | MMR | Polio | Prevnar | Varicella |
| @ 3 months                            | 1    | 1     | 1   |     | 1     | 1       |           |
| @ 5 months                            | 2    | 2     | 2   |     | 2     | 2       |           |
| @ 7 months                            | 3    | 2     | 2   |     | 2     | 2       |           |
| @ 9 months                            | 3    | 2     | 2   |     | 2     | 2       |           |
| @ 12 months                           | 3    | 2     | 2   |     | 2     | 2       |           |
| @ 16 months                           | 4    | 3     | 3   | 1   | 3     | 3       | 1         |
| @ 19 months                           | 4    | 3     | 3   | 1   | 3     | 3       | 1         |
| @ 21 months                           | 4    | 3     | 3   | 1   | 3     | 3       | 1         |
| @ 24 months                           | 4    | 3     | 3   | 1   | 3     | 3       | l         |
| @ 72 months                           | 5    | 3     | 4   | 2   | 4     | 4       | 1         |



#### Clients who could have been UTD with ONE additional visit

This represents 25.0% of the total clients in this age group.

There were 2 clients 24-36 months of age who could have been UTD with additional immunizations.

This represents 25.0% of the total clients in this age group.

| Children Who Could Have Been Brought Up-To-Date With Additional Immunizations |     |       |  |  |  |
|---|-----|-------|--|--|--|
| 24-36 Months  | 2   | 25.0% |  |  |  |
| 1 Vaccine Needed  | 7 1 | 50.0% |  |  |  |
| 2 Vaccines Needed   | 0   | ∫ .0% |  |  |  |
| 3 Vaccines Needed   | 1   | 50.0% |  |  |  |
| 4 Vaccines Needed   | 0   | .0%   |  |  |  |

1 client needed only 1 vaccine to be brought UTD

That 1 client represents 50.0% of the 2 clients who could have been brought UTD.



#### **Late Start or Dropped Off Schedule After a Good Start**

- The upper portion of table shows Late Start Rates for 3 different age groups.
- The lower portion of table displays <u>Drop Off Rates</u> for 5 different age groups.

| Children Who Got A Late Start or Have Dropped Off Schedule After A Good Start |                       |       |                              |  |  |
|---|-----------------------|-------|------------------------------|--|--|
| _   |                       | 16.7% | 36-72 mo. age group          |  |  |
| Late Start Rates <sup>1</sup>   | Beginning > 3 mo. age | 12.5% | 24-35 mo. age group          |  |  |
|   |                       | 16.7% | 12-23 mo. age group          |  |  |
|   | 60-72                 | 20.0% | 24 month status <sup>2</sup> |  |  |
|   | 48-59                 | 40.0% | 24 month status              |  |  |
| <b>Drop Off Rates</b>   | 36-47                 | .0%   | 24 month status              |  |  |
|   | 24-35 mo. age         | 25.0% | 24 month status              |  |  |
|   | 12-23 mo. age         | 33.3% | 12 month status <sup>3</sup> |  |  |



#### **Calculating the Drop Off Rate**

| Children Who Got A Late Start or Have Dropped Off Schedule After A Good Start |                       |       |                              |  |  |
|---|-----------------------|-------|------------------------------|--|--|
| Late Start Rates <sup>1</sup>   |                       | 16.7% | 36-72 mo. age group          |  |  |
|   | Beginning > 3 mo. age | 12.5% | 24-35 mo. age group          |  |  |
|   |                       | 16.7% | 12-23 mo. age group          |  |  |
|   | 60-72                 | 20.0% | 24 month status <sup>2</sup> |  |  |
|   | 48-59                 | 40.0% | 24 month status              |  |  |
| Drop Off Rates  | 36-47                 | .0%   | 24 month status              |  |  |
|   | 24-35 mo. age         | 25.0% | 24 month status              |  |  |
|   | 12-23 mo. age         | 33.3% | 12 month status <sup>3</sup> |  |  |

<sup>1)</sup> A client who did not receive dose 1 of DTAP by 90 days is considered to have gotten a Late Start.

<sup>3)</sup> Drop off rate @ 12 months of age equals % of clients who had 1 DTaP by 6 months of age minus % of clients who had 3 DTaP by 12 Months.



DTaP is the equivalent of a DTaP, a DTP or a DT.



<sup>2)</sup> Drop off rate @ 24 months of age equals % of clients who had 1 DTaP by 6 months of age minus % of clients who had 4 DTaP by 24 Months.

#### No Birth Dose of Hep B and Have Not Completed the 3 Dose Series

| Clients Who Do Not Have a Birth Dose of HepB and Have Not Completed the 3 Dose Series |                     |           |  |  |
|---|---------------------|-----------|--|--|
|   | Number <sup>4</sup> | Percent 5 |  |  |
| Clients Missing Birth Dose Of Hep B   | 4                   | 14.8%     |  |  |

- 4) Count of Clients who do not have a birth dose and did not complete the 3 dose Hep B series. These clients must be between 6 months and 72 months old on evaluation date and have at least 1 immunization in NCIR.
- 5) Per cent of all clients (between 6 and 72 months old with at least 1 immunization in NCIR) who do not have a birth dose and did not complete the 3 dose Hep B series.

Note the footnotes here for further clarification of the clients being assessed.



#### **Missed Opportunities**

A missed opportunity is defined as a client receiving one or more doses of a vaccine at a visit and was due to receive additional doses but, did not.

#### Missed Opportunity Assessment

| Age Group on<br>Evaluation Date       | Total Clients<br>in Age Group | Clients Not up to Date |         | Missed Opportunity on Last Visit |         |
|---------------------------------------|-------------------------------|------------------------|---------|----------------------------------|---------|
|                                       |                               | Count                  | Percent | Count                            | Percent |
| <12 months<br>7 month<br>benchmark    | 4                             | 3                      | 75.00%  | 1                                | 33.3%   |
| 12-23 months<br>12 month<br>benchmark | 6                             | 3                      | 50.00%  | 2                                | 66.7%   |
| 24-35 months<br>24 month<br>benchmark | 8                             | 4                      | 50.00%  | 3                                | 75.0%   |
| 36-72 months<br>24 month<br>benchmark | 12                            | 6                      | 50.00%  | 2                                | 33.3%   |

NOTE: Missed opportunity on last visit may reflect incomplete documentation of immunization histories rather than true missed opportunities for simultaneous vaccination.



Where to Go for More Help?





#### **Contact your Regional Immunization Program Consultant (RIC)**

The RIC Coverage Map with contact information is located on the Immunization Branch website:

https://www.immunize.nc.gov/contacts.htm

#### **NC Vaccines Help Desk**

1-877-873-6247

(Monday – Friday 7:00 AM – 7:00 PM ET and Saturday 8:00 AM – 4:00 PM ET)

https://ncgov.servicenowservices.com/csm\_vaccine?id=immunizations&sys\_id=69f035b11b037c9099510f6fe54bcbee



# Appendix



# **NCIR** Roles

| NCIR Role         | Role Definition  | Corollary Role in CVMS |  |
|-------------------|--|------------------------|--|
| Reports Only      | This person in NCIR is only able to search for clients and view/print client specific records.   | N/A                    |  |
| Typical User      | Person who can manage, including add and edit, clients in NCIR, as well as manage inventory and ordering. This role also has all of the functionality of the Reports Only role.  | Healthcare Provider    |  |
| Inventory Control | Person who can manage inventory and ordering, as well as all of the functionality of the Typical user and Reports Only roles.  | N/A                    |  |
| Administrator     | Person who can manage organization users, sites, and clinicians in NCIR. They run practice-level reports, including reminder/recall. This role also has all of the functionality of the Reports Only, Typical User, and Inventory Control roles. | Location Manager       |  |

